



## New species and new records of *Miroculis* Edmunds (Ephemeroptera: Leptophlebiidae) from Southeastern Brazil

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### Abstract

In the present work, based mainly on material from environmental protection areas in the State of Espírito Santo, we describe a new species of *Miroculis* (*Miroculis*). The male imago of *M. (M.) caparaoensis*, **sp. nov.** can be distinguished from other members of the subgenus by the following combination of characteristics: 1) dorsal portion of eyes on a short stalk, dorsal upper portion circular with 12–18 large-sized facets in longest row; 2) forewings with membrane translucent, longitudinal and crossveins brown; 3) abdominal color pattern; 4) posteromedian margin of styliger plate with small concavity; 5) penes length approximately 0.70 length of forceps segment 1. *Miroculis* (*Ommaethus*) *mourei* and *M. (M.) fittkai* are reported for the first time from the region.

**Key words:** Taxonomy, Neotropics, mayfly, Caparaó, Atlantic Forest

### Introduction

The genus *Miroculis* Edmunds (Ephemeroptera: Leptophlebiidae) is currently composed of 14 described species, ranging from Northeastern Argentina to Trinidad (Domínguez 2007, Peters *et al.* 2008). In Brazil *Miroculis* is one of the most species rich genera of Leptophlebiidae, with eight species recorded until now (Domínguez *et al.* 2006). In spite of this, we can consider that the genus has been poorly studied in the country, since most of these records are based on the original description and no other species has been described since the revision of the genus by Savage & Peters (1983).

In the present paper, as part of an effort to study the mayfly fauna of the State of Espírito Santo, we describe a new species of *Miroculis* (*Miroculis*), and extend the distributional range of two species, *Miroculis* (*Ommaethus*) *mourei* Savage & Peters, and *M. (M.) fittkai* Savage & Peters.

The material examined is housed in the following institutions: Invertebrate Collection of the Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Brazil; Entomological Collection of the Universidade Federal do Espírito Santo (UFES), Vitória, Brazil; and Collection of the Laboratório de Diversidade de Insetos Aquáticos of the Universidade Federal do Espírito Santo (CEUNES), São Mateus, Brazil.

### Results

#### *Miroculis* (*Miroculis*) *caparaoensis*, **sp. nov.**

**Description.** *Nymph.* Unknown.

*Male imago* (Figs. 1–2).

Maximal length: Body 5.75–7.1 mm; Cerci broken; Forewing 5.9–6.4 mm; Hind wing 1.6–1.8 mm; Prothoracic legs, 5.40–5.75 mm.